

Honorable Kelley S. Coyner  
Administrator  
Research and Special Programs Administration  
Washington, D.C. 20590

Dear Ms. Coyner:

The National Transportation Safety Board received your October 30, 1998, letter updating the status of Safety Recommendations P-87, P-90-21, and P-97-14 through -24, which were issued to the Research and Special Programs Administration (RSPA). After receiving the letter, Office of Pipeline Safety (OPS) and Safety Board staff met on November 13, 1998, to discuss the actions the OPS has taken on these safety recommendations.

On September 24, 1987, as a result of its investigation of a March 12, 1986, Lone Star Gas Company natural gas explosion and fire near Fort Worth, Texas, the Safety Board issued Safety Recommendation P-87-34, asking that RSPA revise 49 Code of Federal Regulations (CFR) 192 to require that gas company system maps and records be maintained accurately to identify the locations, size, and operations pressure of all of their pipelines. The Safety Board understands that the regulations at Part 192 do not require recording of operating pressure, but do require that the operating company's system maps and records be maintained accurately and identify the locations and size, of all of their pipelines. The Safety Board requests that RSPA reexamine its response and require that the regulation be amended to include the recording of the operating pressure. Pending a reply from RSPA, Safety Recommendation P-87-34 has been classified "Open-Acceptance Response"

On April 20, 1990, as a result of its investigation of several natural gas pipeline accidents, between September 16, 1988, and March 29, 1989, with the Kansas Power and Light Company, the Safety Board issued Safety Recommendation P-90-21. The Safety Board asked that RSPA assess existing gas industry programs for educating the public on the dangers of gas leaks and on reporting gas leaks to determine the appropriateness of information provided, the effectiveness of educational techniques used, and those techniques used in other public education programs and that RSPA, based on its findings, amend the public education provisions of the Federal regulations. The Safety Board is disappointed that RSPA has not implemented the recommended action. Also, RSPA has not addressed the specific issue of assessing existing gas industry programs for public education on gas leaks. Accordingly, Safety Recommendation P-90-21 has been classified "Open-Unacceptable Response," pending a further reply from RSPA on how it intends to implement the recommendation.

On January 6, 1998, as a result of its safety study *Protecting Public Safety through Excavation Damage Prevention*, the Safety Board issued Safety Recommendations P-97-14 through -24 to RSPA.

Safety Recommendation P-97-14 asked that RSPA conduct at regular intervals joint government and industry workshops on excavation damage prevention that highlight specific safety issues, such as full participation, enforcement, good marking practices, the importance of mapping, and emergency response planning. The Safety Board is pleased that RSPA is implementing the recommended action. The Board recognizes the "best practices work" and believes that information could be used to help in evaluating State programs. Accordingly, Safety Recommendation P-97-14 has been classified "Open-Acceptable Response," pending a further reply from RSPA on the status of implementing this recommendation.

Safety Recommendation P-97-15 asked that RSPA initiate and periodically conduct, in conjunction with the American Public Works Association (APWA), detailed and comprehensive reviews and evaluations of existing State excavation damage prevention programs and recommend changes and improvements, where warranted, such as full participation, administrative enforcement of the program, pre-marking requirements, and training requirements for all personnel involved in excavation activity. At the November 13 meeting Safety Board Staff met with RSPA and discussed the recommendation. The discussion centered on the intent of the recommendation, which was, that RSPA conduct a review and evaluation of the existing systems, something that can be done by RSPA working with the States and industry. Again the Board recognizes the "best practices work" and believes that information could be used to help in evaluating State programs. Pending a further reply from RSPA on implementing this recommendation, Safety Recommendation P-97-15 has been classified "Open-Acceptable Response,"

Safety Recommendation P-97- 16 asked that RSPA sponsor independent testing of locator equipment performance under a variety of field conditions. Safety Recommendation P-97-17 asked that RSPA, as a result of testing outlined in Safety Recommendation P-97-16, develop uniform certification criteria of locator equipment. The Safety Board understands that RSPA is considering research to advance underground facility locating technology so that buried lines, particularly plastic pipelines in gas distribution systems, can be accurately located to minimize third-party damage. The research will identify and evaluate location equipment for buried plastic gas mains and services, will identify and evaluate both existing equipment and equipment under development, will develop performance criteria for new generations of equipment capable of locating buried plastic pipelines, and will investigate alternative ways to design plastic pipe so that it can be more easily located by pipeline operators using pipe location equipment. Additionally, the Safety Board understands that RSPA's best practices study team will include a specific "task team" to determine the best practices in locating and marking activities and that RSPA has requested additional funding to support these efforts.

Further, RSPA has advised the Board that it conducts collaborative research and tests with industry, independent laboratories, and pipeline operators to develop effective underground location technologies, believing that working cooperatively with these parties is

Because RSPA's response appears to outline an acceptable plan, Safety Recommendations P-97-16 and -17 have been classified "Open Acceptable Alternate Response." The Safety Board would appreciate receiving a copy of the results of the tests done in implementing Safety Recommendation P-97-16, the date when the safety recommendation will be fully implemented, and an explanation of how under Safety Recommendation P-97-17, RSPA will be working with the industry organizations on research and technology as the certification criteria is developed by the private sector.

Safety Recommendation P-97-18 asked that RSPA, once locator equipment performance has been evaluated and defined by certification criteria as outlined in Safety Recommendation P-97-17, review State requirements for location accuracy and hand-dig tolerance zones to determine that they can be accomplished with commercially available technology. RSPA has advised the Board that hand-dig zones are set by State and local jurisdictions with reference to local conditions and that this topic will be examined by its damage prevention best practices team. RSPA further states that it will encourage changes in the tolerance zones if such action is indicated by the results of the review of State excavation law requirements by the best practices team. Accordingly, pending further response from RSPA on the findings of this study team regarding State excavation requirements and depending on RSPA's plans to ensure the implementation of the recommended action, Safety Recommendation P-97-18 has been classified as "Open-Acceptable Alternate Response."

Safety Recommendation P-97-19 asked that RSPA develop mapping standards for a common mapping system, with a goal to actively promote its widespread use. Because RSPA has advised the Board that it concurs with the recommendation and is working toward implementing it, Safety Recommendation P-97-19 has been classified "Open-Acceptable Response," pending a further reply from RSPA. The Safety Board would appreciate periodic updates on the efforts to implement the recommendation. Further, the Board reminds RSPA that the 1998 safety study and safety recommendation address mapping problems for local distribution services and the need for standards to address these mapping problems.

Safety Recommendation P-97-20 asked that RSPA develop and distribute to pipeline operators written guidance to improve the accuracy of information for reportable accidents, including parameters for estimating property damage resulting from an accident. Safety Recommendation P-97-21 asked that RSPA, as part of the comprehensive plan for the collection and use of gas and hazardous liquid data, revise the cause categories on the accident report forms to eliminate overlapping and confusing categories and to clearly list excavation damage as one of the data elements, and consider developing categories that address the purpose of the excavation. As RSPA is working with the Interstate Natural Gas Association of America (INGAA) and the American Petroleum Institute (API) to improve accident data collection information, especially related to excavation damage, and will then apply it to improve information collected, Safety Recommendations P-97-20 and -21 have been classified "Open-Acceptable Response," pending further information from RSPA on the status of implementing the recommendations. The Safety Board encourages RSPA to stay on top of these initiatives and to ensure that the collected data is applied to mandatory requirements.

Safety Recommendation P-97-22 asked that RSPA, in conjunction with the APWA, develop a plan for collecting excavation damage exposure data. The Safety Board is pleased that RSPA will work with the APWA, One-Call Systems International, and other interested parties on this issue and urges RSPA to develop a plan to collect this data. Pending a further response from RSPA, Safety Recommendation P-97-22 has been classified "Open Acceptable Response." Once completed, the Safety Board would appreciate receiving a copy of the development plan.

Safety Recommendation P-97-23 asked that RSPA work with the one-call Systems to implement the plan outlined in Safety Recommendation P-97-22 to ensure that excavation damage exposure data are being consistently collected. Safety Recommendation P-97-24 asked that RSPA use the excavation damage exposure data outlined in Safety Recommendation P-97-22 in the periodic assessments of the effectiveness of State excavation damage prevention programs described in Safety Recommendation P-97-I 5. The Safety Board is pleased that RSPA is working on the recommended actions. Again the Board reminds RSPA to review the exposure data and to complete an actual assessment as recommended. Pending further response from RSPA, Safety Recommendations P-97-23 and -24 have been classified "Open Acceptable Response."

The Safety Board looks forward to further updates on the implementation of Safety Recommendations P-87-34, P-90-21, and P-97-14 through -24.

Sincerely,

**ORIGINAL SIGNED BY**

**JIM HAL**

Jim Hall  
Chairman

cc: Mr. Robert Clarke, Safety and Health Team Leader  
Office of Transportation Policy Development